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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,838	09/08/2003	Alan M. Warwick	13768.440	3005

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EXAMINER
LEMMA, SAMSON B

ART UNIT	PAPER NUMBER
2132	

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<table>
<tr><td rowspan="2">Office Action Summary</td><td colspan="2">Application No.</td><td colspan="2">Applicant(s)</td></tr>
<tr><td colspan="2">10/658,838</td><td colspan="2">WARWICK ET AL.</td></tr>
<tr><td></td><td>Examiner</td><td></td><td>Art Unit</td><td></td></tr>
<tr><td></td><td>Samson B. Lemma</td><td></td><td>2132</td><td></td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *08 September 2003*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-34* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-34* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

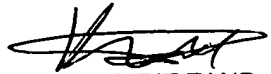8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

KAMBIZ ZAND
PRIMARY EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date *09/03 & 06/05*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

1.   This is in reply to application filed on September 08/2003. **Claims 1-34** are

pending/examined.

Priority

2.   This application does not claim priority of an application. Therefore, the effective

filling data for the subject matter defined in the pending claims of this

application is **09/08/2003.**

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or
described as set forth in section 102 of this title, if the differences between the
subject matter sought to be patented and the prior art are such that the subject
matter as a whole would have been obvious at the time the invention was made to a
person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

4.   **Claims 1-34** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Dicorpo et al (hereinafter referred as **Dicorpo**) (U.S. Patent 6,816,917 B2) (filed

on 01/15/2003) in view of **Narain** (hereinafter referred as **Narain**)(U.S.

Publication No: 2003/0084135 A1) (filed on September 28, 2001)

5.   **As per claims 1, 14-15, 24 and 30** **Dicorpo discloses in a computer system**

that including a plurality of initiators, [Abstract, "plurality of initiators", and

figure 1, ref. Num "110" and "120"] **each for initiating communication with**

target devices [Abstract, see, "Physical device" and column 19, lines 17-19;

figure 1, 5, 7 and 8] (In some embodiments, the virtual LUN can have a specified

interface definition, for example a general definition that can emulate many different physical devices) **over a network,** [column 11, lines 15-18] (Internet SCSI (iSCSI)-to-SCSI applications,) **a method for configuring the computer system to securely communicate with a target device over the network,** [Abstract, "an apparatus comprises a data path capable of coupling a physical device to a plurality of initiators") **the method comprising the following performed by an abstraction module that configures each of the plurality of initiators in a manner that security conflicts between the plurality of initiators is avoided:** [Abstract, "A controller comprises an executable process that creates a virtual device object that resolves conflicting concurrent attempts to access the physical device by a plurality of initiators.")

- **An act of exposing a common interface that may be used to configure any of the plurality of initiators;** [Abstract and column 13, lines 34-36 and figure 7] (See abstact, "An interface is coupled to the data path and forms a command pathway between the plurality of initiators and the physical device". And on column 13, lines 34-36, it has been disclosed that the protocol interface 710 serves as a common interface point for external communications.)

- **An act of receiving an indication through the common interface that a selected initiator from among the plurality of initiators is to be configured to communicate with a selected target device;** [Abstract; column 4, lines 36-38; column 13, lines 27-37 and figure 7](For instance, on column 4, lines 36-38 and on abstract, it has been disclosed that an interface is coupled to the data path and forms a command pathway between the plurality of initiators and the physical device. Furthermore, at least on column 13, lines 27-37, the following has been disclosed. " The protocol interface 710 performs virtual/physical mapping to

facilitate virtualization of storage LUNs. The protocol interface 710 receives commands

and configures information blocks for transmission, for example by matching status to

the correct command, and supplying header information for status frames. The protocol

interface 710 also handles initiator protocol, for example by obtaining unit attention of

the first access of an initiator. The protocol interface 710 can manage signals from

multiple LUNs. The protocol interface 710 serves as a common interface point for

external communications.")

• **An act of retrieving security information from a database [Figure 7,
ref. Num "722" or/and "724"] that includes information that is relevant to
configuring security for any of the plurality of initiators; an act of
identifying a security configuration of the selected initiator using the
retrieved security information;**[Column 17, lines 38-46 and column 16, lines
40-47 and Column 15, lines 62-column 16, lines 47; column 13, lines 46-
column 14, line 4]

• **An act of determining that the identified security configuration
would not cause the selected initiator to conflict with any of the other of
the plurality of initiators; and an act of configuring the selected initiator
using the identified security configuration. [See, abstract and claim 1]** (an

interface coupled to the data path and forming a command pathway between the

plurality of initiators and the physical device; and a controller coupled to the data path

and coupled to the interface, the controller comprising an executable process that creates

a virtual device object that resolves conflicting concurrent attempts to access the

physical device by a plurality of initiators, the virtual device object being capable of

protecting state of the physical device during successive data transfer and media

movement operations by emulating responses of the physical device and redirecting

access to the physical device when the physical device becomes available.)

Dicorpo does not explicitly teach that **retrieving security information from a database.**

However, in the same field of endeavor, **Narain discloses retrieving security information from a database.** [See, at least figure 1, ref. Num "150" and paragraph 0028; paragraph 0007; paragraph 0015]

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to combine the features of having a particular configuration database for **retrieving security information** as per teachings of **Narain** in to the method as taught by **Dicorpo** for the purpose avoiding localizing instructions to each devices by cataloging all abstractions for all algorithms in configuration database and ultimately creating end-to-end requirement for a very large class of system or network. [See Narain; paragraph 0019]

6.   **As per claims 2-3 and 16-17**, the combination of **Dicorpo and Narain** discloses the method as applied to claims above. Furthermore, **Dicorpo** discloses, the method wherein the identified security configuration is different than the retrieved security information. [figure 7; and Column 17, lines 38-46 and column 16, lines 40-47 and Column 15, lines 62-column 16, lines 47; column 13, lines 46-column 14, line 4]

7.   **As per claims 4-5 ;18-19 and 28-29**, the combination of **Dicorpo and Narain** discloses the method as applied to claims above. Furthermore, **Narain** discloses

the method, wherein the retrieved security information comprises IPSec configuration information.[Paragraph 0021]

8.   **As per claims 6 and 20**, the combination of **Dicorpo and Narain** discloses the method as applied to claims above. Furthermore, **Dicorpo** discloses the method, wherein the selected initiator is configured to cause communication to occur with the target device using iSCSI. [column 11, lines 15-18] (Internet SCSI (iSCSI)-to-SCSI applications..)

9.   **As per claims 7 and 21**, the combination of **Dicorpo and Narain** discloses the method as applied to claims above. Furthermore, **Narain** discloses the method, wherein the act of retrieving security information from a database comprises an act of retrieving the security information from an Active Directory. [See, at least figure 1, ref. Num "150" and paragraph 0028; paragraph 0007; paragraph 0015]

10.   **As per claims 8 and 22**, the combination of **Dicorpo and Narain** discloses the method as applied to claims above. Furthermore, **Dicorpo** discloses the method, wherein the selected initiator is a hardware initiator. [Abstract; and figure 1, ref. Num "110" and "120"]

11.   **As per claims 9 and 23**, the combination of **Dicorpo and Narain** discloses the method as applied to claims above. Furthermore, **Dicorpo** discloses the method, wherein, wherein the selected initiator is a software initiator. ["making it a hardware/software is an arbitrary design choice"]

12.   **As per claim 10**, the combination of **Dicorpo and Narain** discloses the method as applied to claims above. Furthermore, **Narain** disclose the method, wherein the act of retrieving security information occurs in response to the act of the abstraction module receiving the indication. [Abstract; paragraph 0019]

13.   **As per claims 11-12 and 31**, the combination of **Dicorpo and Narain**

discloses the method as applied to claims above. Furthermore, **Dicorpo**

discloses the method, wherein the indication through the common interface is

received in response to a request to communicate with the selected target device.

[Abstract and column 13, lines 34-36 and figure 7] (See abstact, "An interface is coupled

to the data path and forms a command pathway between the plurality of initiators and

the physical device". And on column 13, lines 34-36, it has been disclosed that the

protocol interface 710 serves as a common interface point for external communications.)

14.   **As per claims 13**, the combination of **Dicorpo and Narain** discloses the method

as applied to claims above. Furthermore, **Dicorpo** discloses the method, wherein

the indication through the common interface is received in response to

initializing the computer system. [Column 14, lines 5-15] (The command filter 712

also performs initialization for LUN virtualization. On system powerup and possibly

other conditions, the system begins with no known state, no starting information. The

initialization procedure collects information for storage in the device state cache 722 to

enable LUN virtualization. In one embodiment, the command filter 712 calls for

initialization and the LUN monitor 714 accesses storage elements in the device state

cache 722 and determines that no state is defined. The LUN monitor 714 accesses the

device profile cache 724 to fill storage elements in the device state cache 722)

15.   **As per claims 25 and 32**, the combination of **Dicorpo and Narain** discloses the

method as applied to claims above. Furthermore, **Dicorpo** discloses the method,

wherein the one or more computer-readable media are physical memory

media.[Figure 5; ref. Num "530") (The router, SCSI Controller 524, interprets

the command and places the interpreted command in the **buffer memory 530**)

16.   **As per claims 26 and 33**, the combination of **Dicorpo and Narain** discloses the

method as applied to claims above. Furthermore, **Dicorpo** discloses the method,

wherein the one or more computer-readable media is persistent memory. [Figure

7; ref.Num"724"; column 15, lines 43-45] (The device profile cache 724 is

typically a non-volatile memory or storage that stores command and response

sequences)

17.   **As per claims 27 and 34**, the combination of **Dicorpo and Narain** discloses the

method as applied to claims above. Furthermore, **Dicorpo** discloses the method,

wherein the one or more computer-readable media is volatile system memory.

[column 15, lines 39-40; Figure 7, ref.Num "722"] (The device state cache 722 is

a volatile memory or storage that stores]

Conclusion

18.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.(See PTO-Form 892).

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Samson B Lemma whose telephone number is 571-

272-3806. The examiner can normally be reached on Monday-Friday (8:00 am---4:

30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, BARRON JR GILBERTO can be reached on 571-272-3799. The fax

phone number for the organization where this application or proceeding is assigned

is 703-873-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

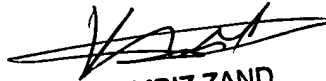information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov.

Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAMSON LEMMA
S.L.
08/02/2006

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